IN THE CLAIMS

The claims of the present application are listed below, marked with the changes to be made by the present amendment.

1. (Currently Amended) A method for visualization of data knowledge on a computer, comprising the steps of:

performing data mining of data to generate rules;

representing said rules as objects in a three-dimensional space, said rules being displayed in at least one group with a rule having a highest strength being represented in a prominent position in said at least one group;

displaying said three-dimensional space on a graphical user interface; and

permitting using navigation and zooming in said three-dimensional space using a computer input apparatus.

2. (Currently Amended) A method as claimed in claim 1, wherein said step of representing represents all rules generated during said data mining as objects in the three-dimensional space.

3. (Original) A method as claimed in claim 1, wherein said step of representing represents less than all rules generated during said data mining.

4. (Currently Amended) A method as claimed in claim 1, wherein said rules are represented as spheres in the three-dimensional space on the graphical user interface, and said spheres of said at least one group are displayed in spiral arrangement.

5.(Original) A method as claimed in claim 4, wherein said spheres have a size representing a relative number of examples covered by the corresponding rule.

6.(Original) A method as claimed in claim 1, further comprising the step:

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displaying information on a rule upon selection of a three-dimensional object corresponding to
the rule.

7. (Original) A method as claimed in claim 6, wherein said displaying step displays an index of the corresponding rule.

8. (Currently Amended) A method for cleansing noise from data, comprising the steps of:
generating objects for display representing rules obtained by data mining in a database;
grouping the objects according to rule class;
positioning objects within a group according to rule strength; and
filtering out rules of lesser strength from said display of objects, including the sub-steps of:
acquisition of a concept by a concept learner;
evaluation of learned class descriptions and detection of concept components;
optimization of class descriptions according to predetermined criteria of class
description evaluation; and
formulation of a filter for modified concept descriptions and filtration of training data.

9. (Original) A method as claimed in claim 8; further comprising the steps of:
applying a closed loop learning approach;
running a learning program at least two times including a first run to acquire model
descriptions and a second run to acquire detailed descriptions; and
using filtered training data on said second run.

10. (New) A method as claimed in claim 1, wherein said computer input apparatus is a computer keyboard and mouse-like apparatus.

11. (New) A method as claimed in claim 1, wherein said rule having a highest strength is displayed at a center of said at least one group.

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12. (New) A method as claimed in claim 1, wherein said rules of said at least one group are displayed as a spiral arrangement of spheres, said rules of lesser strength being displayed at outer portions of said spiral arrangement.

13. (New) A method as claimed in claim 1, wherein said at least one group is a plurality of groups, each of said plurality of groups being represented as classes of rules.

14. (New) A method as claimed in claim 1, further comprising the step of:
upon selection of one of said objects corresponding to a rule, displaying raw data covered by the rule.

15. (New) A method as claimed in claim 14, wherein said displaying step displays the raw data as a projection on a graph.

16. (New) A method as claimed in claim 1, further comprising the steps of:
selectively displaying walls of the three-dimensional space; and
selectively displaying a floor of the three-dimensional space.

17. (New) A method as claimed in claim 1, wherein said rules are generated by an inferencing engine.

18. (New) A software program operable on a computer to carry out a method for visualization of data knowledge on a computer, comprising the steps of:
performing data mining of data to generate rules;
representing said rules as objects in a three-dimensional space; and
permitting using navigation and zooming in said three-dimensional space.

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